



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,352	10/18/2000	Duane M. Pinault	55126USA3A.002	3971
32692	7590	10/20/2003		
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				
EXAMINER NORDMEYER, PATRICIA L				
ART UNIT 1772				
PAPER NUMBER				

DATE MAILED: 10/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/691,352

Applicant(s)

PINAULT ET AL.

Examiner

Patricia L. Nordmeyer

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 26-31 and 35-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 20-25 and 32-34 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Withdrawn Rejections

1. The 103 rejection of claims 1, 8, 26, 28, 29 and 36 – 38 over Miller et al. in view of George et al. are withdrawn due to Applicant's arguments in Paper #12.

Repeated Rejections

2. Claims 1 – 19, 26, 27, 30, 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuei (USPN 5,783,303).

Tsuei discloses an article with a plurality of ceramic granules (Column 11, lines 47 – 51 and Figure 1, #16) bonded to a polymeric film (Column 11, lines 28 – 30 and Figure 1, #11) by a radiation curable (Column 4, lines 41 – 44) aliphatic urethane acrylic copolymer (Column 4, lines 30 – 31). A variety of items may be added to the curable coating including pigments, dyes, ultraviolet absorbers, ultraviolet scavengers, fillers and adhesion promoters (Column 7, lines 26 – 37). In order to improve adhesion to the coatings, the film may be primed (Column 11, lines 43 – 45). The article may also be formed from a free-standing coating with a layer of adhesive to attach particles to the surface (Column 12, lines 26 – 45). A size coating, sealant, of varying thickness is placed over the particles, completely covering some of the particles, and adhesive layer to help bond the particles to the film (Column 10, lines 39 – 59). The article may be used as a floor covering (Column 9, lines 59 – 64). The product has white ceramic granules (Column 11, line 52) adhered to a film with transparent adhesive (Column 10, lines 63 – 65) that was

Art Unit: 1772

tested for flexibility, pliability, (Column 25, lines 14 – 24) and had a tensile elongation of 112% (Column 25, lines 37 – 40).

One of ordinary skill in the art would have recognized that the claimed integrated granule product would be pliable as determined by the flexibility test according to ASTM D-228-00 and ASTM D-882.97 and the aesthetic color of granules are not affected by the cured adhesive since Tsuei teaches a composition made with ceramic granules adhered to a service using an acrylated aliphatic urethane, which are the same parameters of the claimed invention. Therefore, one of ordinary skill in the art would readily determine the optimum flexibility and color affects depending on the end desired results in the absence of unexpected results.

Tsuei teaches solid ceramic granules instead of ceramic coated granules. The solid granules are performing an equivalent function to the Applicant's ceramic coated granules, unforeseen of any unexpected results from the coated ceramic granules. If unexpected results are present from having the coated granules instead of solid particles, these results need to be presented to show that the granules are not equivalent functions.

New Rejections

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1772

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 28, 29 and 37 – 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuei (USPN 5,783,303).

Tsuei discloses an article with a plurality of ceramic granules (Column 11, lines 47 – 51 and Figure 1, #16) bonded to a polymeric film (Column 11, lines 28 – 30 and Figure 1, #11) by a radiation curable (Column 4, lines 41 – 44) aliphatic urethane acrylic copolymer (Column 4, lines 30 – 31). A variety of items may be added to the curable coating including pigments, dyes, ultraviolet absorbers, ultraviolet scavengers, fillers and adhesion promoters (Column 7, lines 26 – 37). In order to improve adhesion to the coatings, the film may be primed (Column 11, lines 43 – 45). The article may also be formed from a free-standing coating with a layer of adhesive to attach particles to the surface (Column 12, lines 26 – 45). A size coating, sealant, of varying thickness is placed over the particles, completely covering some of the particles, and adhesive layer to help bond the particles to the film (Column 10, lines 39 – 59). The article may be used as a floor covering (Column 9, lines 59 – 64). The product has white ceramic granules (Column 11, line 52) adhered to a film with transparent adhesive (Column 10, lines 63 – 65) that was tested for flexibility, pliability, (Column 25, lines 14 – 24) and had a tensile elongation of 112% (Column 25, lines 37 – 40). However, Tsuei fails to disclose the article being a roofing shingle or roll of roofing material, wherein the integrated granule product forms the exposed surface layer of a roofing material and wherein the integrated granule product is suitable as an exposed surface layer of a roofing material

One of ordinary skill in the art would have recognized that the claimed integrated granule product would be pliable as determined by the flexibility test according to ASTM D-228-00 and ASTM D-882.97 and the aesthetic color of granules are not affected by the cured adhesive since Tsuei teaches a composition made with ceramic granules adhered to a service using an acrylated aliphatic urethane, which are the same parameters of the claimed invention. Therefore, one of ordinary skill in the art would readily determine the optimum flexibility and color affects depending on the end desired results in the absence of unexpected results.

Tsuei teaches solid ceramic granules instead of ceramic coated granules. The solid granules are performing an equivalent function to the Applicant's ceramic coated granules, unforeseen of any unexpected results from the coated ceramic granules. If unexpected results are present from having the coated granules instead of solid particles, these results need to be presented to show that the granules are not equivalent functions.

Regarding the limitations of the article being a roofing shingle or roll of roofing material, wherein the integrated granule product forms the exposed surface layer of a roofing material and wherein the integrated granule product is suitable as an exposed surface layer of a roofing material in claims 28 and 37 – 39, it has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to

Art Unit: 1772

the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Allowable Subject Matter

5. Claim 36 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed in Paper #12 regarding the 103 rejection of claims 1 – 19, 26, 27, 30, 31 and 35 have been fully considered but they are not persuasive.

In response to Applicant's argument that no prima facie case of obviousness has been shown with the ceramic granules of Tsuei, there is no evidence that would lead one of ordinary skill in the art to believe that the granules of Tsuei are not a equivalent function the ceramic coated granules of the invention. With the use of the ceramic coated granules, the outside of the granules is the item that is in contact with the materials of invention, and the same is true for the ceramic granules. Functionally, the granules may be used to produce the desired outcome since they contain the same material and are both in granular form.

Art Unit: 1772

7. Applicant's arguments with respect to claims 1, 8, 26, 28, 29 and 36 – 38 rejected in view of Miller et al. in view of George et al. have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (703) 306-5480. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (703) 308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Patricia L. Nordmeyer
Examiner
Art Unit 1772

pln
pln


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

10/9/03